

MANUFACTURING EXTENSION PARTNERSHIP

Success Stories from the Field

Alkota Cleaning Systems, Inc.

South Dakota Manufacturing Extension Partnership

Lean Principles Improve Manufacturing Processes at Alkota Cleaning Systems, Inc.

Client Profile:

Alkota Cleaning Systems, Inc., founded in 1964, is a recognized leader in the pressure cleaning industry. The company's comprehensive line of high pressure washers, parts cleaners, and wastewater treatment systems allows them to meet almost any industrial cleaning need in thousands of applications worldwide. The privately-owned company employs 100 people at its facility in Alcester, South Dakota.

Situation:

Alkota wanted to decrease cycle time on their assembly line as well as organize their WIP (work in process) area. Terry Sampson of the South Dakota Manufacturing Extension Partnership (Dakota MEP), a NIST MEP network affiliate, visited the facility and explained the Lean Principles program.

Solution:

Dakota MEP conducted Lean training and two Value Stream Mapping (VSM) projects which focused on two areas for improvement: 1) decrease the cycle time it took to produce units on the X-4 assembly line to improve efficiency and produce more; and 2) organize and consolidate the sheet metal WIP area, making it easier and quicker to find and pull the parts necessary for production.

In the first event, the current method of production on the X-4 assembly line was analyzed. The X-4 line was chosen because it produces their most popular group of equipment. The analysis performed by Dakota MEP showed that the cycle times were very long because employees were working on four to five units at a time, thus taking longer than necessary to finish each unit. Dakota MEP recommended the assemblers work on only two units at a time and then move on to the next batch. This change allowed a more continuous flow of production, by allowing continuous testing and crating of units. Quality has improved and employees are better able to manage their day. Units are ready earlier in the day for shipment that otherwise might not go until the following day because of logistics for the shipping department. Products are produced faster with the smaller batches. In the event, Dakota MEP worked with Alkota to reorganize the WIP inventory, freeing up space and making the area a safer place to work.

Results:

- * Increased sales from 4 percent to 4.4 percent.
- * Increased space by 18 percent.
- * Created a more organized and safer work environment.

Testimonial:

"Continuous improvement never stops."

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Bob James, Cost Accountant